### **ENVIRONMENTAL CHEMISTS**

Date of Report: 12/02/99 Date Received: 11/18/99

Project: Metro Self Monitor Grab-PO# M63061

Date Samples Extracted: 11/18/99

Date Extracts Analyzed: 11/24/99 & 11/30/99

# RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

# Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	Chromium	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M63061	0.53	0.56	0.62	0.09
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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Date of Report: 12/02/99 Date Received: 11/18/99

Project: Metro Self Monitor Grab-PO# M63061

# QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 911067-01 (Duplicate)

				Relative	
	Reporting	Sample	Duplicat	e Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.26	0.26	0	0-20
Copper	mg/L (ppm)	0.53	0.59	11	0-20
Nickel	mg/L (ppm)	0.28	0.31	10	0-20
Zinc	mg/L (ppm)	0.14	0.17	19	0-20

Laboratory Code: 911067-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery	% Recov	ery	Acceptance		
Analyte	Units	Level	Result	MS		MSD		Criteria	RPD	
Chromium	mg/L (ppm)	5	0.26	92		101		80-120	9	7
Copper	mg/L (ppm)	5	0.53	95		105		80-120	10	
Nickel	mg/L (ppm)	10	0.28	91		98		80-120	7	
Zinc	mg/L (ppm)	5	0.14	92		106		80-120	14	

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recover	y % Recover	y Acceptance		
Analyte	Units	Level	LCS	LCSD	Criteria	RPD	
Chromium	mg/L (ppm)	5	105	107	80-120	2	
Copper	mg/L (ppm)	5	104	107	80-120	3	
Nickel	mg/L (ppm)	10	103	104	80-120	1	
Zinc	mg/L (ppm)	5	102	105	80-120	3	

PRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

DH CII 11-18-99

# SAMPLE CHAIN OF CUSTODY

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FORMS/COC

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 2, 1999

#### DUPLICATE COPY

#### **INVOICE #99ACU1202-1**

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor Grab-PO# M63061: Results of testing requested by Gerry Thompson for material submitted on November 18, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample

\$ 80.00

PLEASE NOTE: As a convenience for our valued clients, we can accept credit cards (VISA, MasterCard or government purchasing cards) for payment on our invoices. Please contact our office if you would like to take advantage of this service.

FEDERAL TAX ID (b) (6)

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 2, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 18, 1999 from your Metro Self Monitor Grab-PO# M63061 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

janul ful

Dianne C. Hurt Project Manager

Enclosures ACU1202R.DOC